

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant : Fred R. Kramer, Sanjay Tyagi, Art Unit : Unknown
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Serial No. :

Filed :

Title : OPTICALLY DECODABLE MICROCARRIERS, ARRAYS AND METHODS

Commissioner for Patents
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Alexandria, VA 22313-1450

INFORMATION DISCLOSURE STATEMENT

Applicant submits the references listed on the attached form PTO-1449.

This statement is being filed with the application. Accordingly, only copies of foreign patent documents and non-patent literature are enclosed. Please apply any charges or credits to Deposit Account No. 06-1050.

Respectfully submitted,

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3/2/04

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March 2, 2004
Date of Deposit

Substitute Form PTO-1449 (Modified) Information Disclosure Statement by Applicant (Use several sheets if necessary) (37 CFR §1.98(b))	U.S. Department of Commerce Patent and Trademark Office		Attorney's Docket No. 07763-057001	Application No.
	Applicant Fred R. Kramer, Sanjay Tyagi, Salvatore A.E. Marras and Hiyam Elhajj Trunfio			
	Filing Date		Group Art Unit	

U.S. Patent Documents

Examiner Initial	Desig. ID	Document Number	Publication Date	Patentee	Class	Subclass	Filing Date If Appropriate
	AA	5,925,517	Jul. 20, 1999	Tyagi et al.			
	AB	6,150,097	Nov. 21, 2000	Tyagi et al.			
	AC						
	AD						
	AE						
	AF						
	AG						
	AH						
	AI						
	AJ						
	AK						

Foreign Patent Documents or Published Foreign Patent Applications

Examiner Initial	Desig. ID	Document Number	Publication Date	Country or Patent Office	Class	Subclass	Translation	
							Yes	No
	AL	WO/00/14278	Mar. 16, 2000	WIPO				
	AM							
	AN							
	AO							
	AP							

Other Documents (include Author, Title, Date, and Place of Publication)

Examiner Initial	Desig. ID	Document
	AQ	Adessi, et al. "Solid phase DNA amplification: characterisation of primer attachment and amplification mechanisms" <i>Nucleic Acids Research</i> , (2000) Vol. 28, No. 20 e87
	AR	Albert et al, "Automatic decoding of sensor types within randomly ordered, high-density optical sensor arrays" <i>Analytical and Bioanalytical Chemistry</i> , (August 2002) Vol. 373, No. 8, pp: 792 - 802
	AS	Bonnet, et al. "Thermodynamic basis of the enhanced specificity of structured DNA probes", <i>Proc. Natl. Acad. Sci.</i> (May 1999) Vol. 96, pp. 6171-6176
	AT	Braeckmans, et al. "Encoding Microcarriers: Present and Future Technologies" <i>Nature Publishing Group, Nature Reviews</i> , (June 2002) Vol. 1 pp. 447-456

Examiner Signature	Date Considered
EXAMINER: Initials citation considered. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.	

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	AU	Brenner, et al. "Gene expression analysis by massively parallel signature sequencing (MPSS) on microbead arrays" <i>Nature Biotechnology</i> , (June 2000) Vol. 18, pp: 630-634
	AV	Brown, et al. "Molecular beacons attached to glass beads fluoresce upon hybridisation to target DNA" <i>Chem. Commun.</i> (2000), 621-622
	AW	Call, et al. "Fabrication of DNA Microarrays Using Unmodified Oligonucleotide Probes" <i>BioTechniques</i> , (February 2001) 30: 368-379
	AX	Chen, et al. "A Microsphere-Based Assay for Multiplexed Single Nucleotide Polymorphism Analysis Using Single Base Chain Extension" <i>Genome Research</i> (2000) 10: 549-557
	AY	Danowski, et al. "Evaluating the chemical spatial resolution of imaging fiber chemical sensors" <i>Microchemical Journal</i> (2001) 70: 51-61
	AZ	Dickinson, et al. "Convergent, Self-Encoded Bead Sensor Arrays in the Design of an Artificial Nose" <i>Analytical Chemistry</i> , (June 1, 1999) 71: 2192-2198
	AAA	Epstein, et al. "High-Density Fiber-Optic Genosensor Microsphere Array Capable of Zeptomole Detection Limits" <i>Analytical Chemistry</i> (2002) 74: 1836-1840
	ABB	Epstein, et al. "Combinatorial Decoding: An approach for Universal DNA Array Fabrication" <i>J. Am. Chem. Soc.</i> (2003) 125: 13753-13759
	ACC	Ferguson, et al. "A fiber-optic DNA biosensor microarray for the analysis of gene expression" <i>Nature Biotechnology</i> (December 1999) 14: 1681-1684
	ADD	Ferguson, et al. "High-Density Fiber-Optic DNA Random Microsphere Array" <i>Analytical Chemistry</i> (November 2000) 72: 5618-5624
	AEE	Guo, et al. "Direct fluorescence analysis of genetic polymorphisms by hybridization with oligonucleotide arrays on glass supports" <i>Nucleic Acids Research</i> , (1994) 22: 5456-5465
	AFF	Han, et al. "Quantum-dot tagged microbeads for multiplexed optical coding of biomolecules" <i>Neuter Biotechnology</i> (July 2001) 19: 631-635
	AGG	Kellar, et al. "Multiplexed microsphere-based flow cytometric assays" <i>Experimental Hematology</i> (2002) 30: 1227-1237
	AHH	Lee, et al. "Importance of replication in microarray gene expression studies: Statistical methods and evidence from repetitive cDNA hybridizations" <i>PNAS</i> (August 29, 2000) 97: 9834-9839
	AII	Liu, et al. "Molecular Beacons for DNA Biosensors with Micrometer to Submicrometer Dimensions" <i>Analytical Biochemistry</i> (2000) 283: 56-63
	AJJ	Lui, et al. "A fiber-Optic Evanescent Wave DNA Biosensor Based on Novel Molecular Beacons" <i>Analytical Chemistry</i> (1999) 71: 5054-5059
	AKK	Marras, et al. "Efficiencies of fluorescence resonance energy transfer and contact-mediated quenching in oligonucleotide probes" <i>Nucleic Acids Research</i> (2002) 30: e122
	ALL	Michael, et al. "Randomly Ordered Addressable High-Density Optical Sensor Arrays" <i>Analytical Chemistry</i> (1998) 70: 1242-1248
	AMM	Miller, Kelli "Downsizing DNA Assays - - Pharmaseq's microtransponders prove that bigger isn't always better" <i>The Scientist</i> (2002) 16[1]: 52
	ANN	Nicewarner-Pena, et al. "Submicrometer Metallic Barcodes" <i>Science</i> (2001) 294: 137-141
	AOO	Oliphant, et al. "BeadArray™ Technology: Enabling an Accurate, Cost-Effective Approach to High-Throughput Genotyping" <i>BioTechniques</i> (June 2002) 32: S56-S61

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Examiner Initial	Desig. ID	Document					
	APP	Rosenthal, Sandra J. "Bar-coding biomolecules with fluorescent nanocrystals" <i>Nature Biotechnology</i> (2001) 19: 621-622					
	AQQ	Spiro, et al. "A Bead-Based Method for Multiplexed Identification and Quantitation of DNA Sequences Using Flow Cytometry" <i>Applied and Environmental Microbiology</i> (2000) 66: 4258-4265					
	ARR	Spruill, et al. "Assessing Sources of Variability in Microarray Gene Expression Data" <i>BioTechniques</i> (2002) 33: 916-923					
	ASS	Steemers, et al. "Screening unlabeled DNA targets with randomly ordered fiber-optic gene arrays" <i>Nature Biotechnology</i> (2000) 18: 91-94					
	ATT	Tsagkatakis, et al. "Spatial and Spectral Imaging of Single Micrometer-Sized Solvent Cast Fluorescent Plasticized Ploy(vinyl chloride) Sensing Particles" <i>Analytical Chemistry</i> (2001) 73: 315320					
	AUU	Tyagi et al, "Molecular Beacons: Probes that Fluoresce upon Hybridization" <i>Nature Biotechnology</i> (1996) 14: 303-308					
	AVV	Tyagi et al. "Multicolor molecular beacons for allele discrimination" <i>Nature Biotechnology</i> (1998) 16: 49-53					
	AWW	Tyagi et al. "Taking a census of mRNA populations with microbeads" <i>Nature Biotechnology</i> (2000) 18: 597-598					
	AXX	Walt, David R. "Bead-based Fiber-Optic Arrays" <i>Science</i> (2000) 287: 451-452					
	AYY	Walt, David R. "Imaging optical sensor arrays" <i>Current Opinion in Chemical Biology</i> (October 2002) 6: 689-695					
	AZZ	Yang, et al. "BADGE, BeadsArray for the Detection of Gene Expression, a High-Throughput Diagnostic Bioassay" <i>Genome Research</i> (2001) 11: 1888-1898					
	AAAA	Yeakley, et al. "Profiling alternative splicing on fiber-optic arrays" <i>Nature Biotechnology</i> (2002) 20: 353-358					
	ABBB	PharmaSeq, Inc. "Animation: Principle of Microtransponder-Based Assay" http://www.pharmaseq.com/tech.html#desc (pp. 1-3)					

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